

### ABSTRACT

The present invention relates to: recombinant DNA encoding the *Sbf*I restriction endonuclease as well as the *Sbf*I methylase, and expression of the *Sbf*I restriction endonuclease and *Sbf*I methylase in *E. coli* cells containing the recombinant DNA; and methods for cloning the *Sbf*I restriction gene (*sbf*IR) from *Streptomyces species Bf-61* into *E. coli* by PCR. The method relied on primers based on DNA sequences predicted from amino acid sequences of the purified *Sbf*I restriction endonuclease.